

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended) A method of producing a gas generator housing part of a thin-walled tube (22, 24) and a connecting piece laterally mounted thereto, characterized by the following steps:

a) providing a tube (22, 24) having a wall thickness (WS) which amounts to a maximum of 10% of a tube external diameter (D) and a minimum tensile strength which amounts to at least approximately 800 N/mm²;

b) providing a connecting piece having an external diameter (do) which amounts to between 15% and 40% of said tube external diameter (D);

c) aligning said connecting piece radially to said tube (22, 24) such that an end face (78) of said connecting piece faces an outer face of said tube (22, 24);

d) joining said tube (22, 24) and said connecting piece by friction welding, by producing a relative rotation between said tube (22, 24) and said connecting piece and moving said tube (22, 24) and said connecting piece towards each other,

e) providing a maximum welding time amounting to less than 1 sec, preferably less than 0.3 sec and

f) providing a friction depth (h) amounting to less than 80% of said wall thickness (WS) of said tube (22, 24).

Claim 2 (Original) The method according to claim 1, characterized in that said tube (22, 24) has a welding surface which is non-machined before said friction welding process.

Claim 3 (Currently Amended) The method according to claim 1, characterized in that said tube (22, 24) has a peripheral wall (42, 44) with a wall thickness (WS) of a maximum of 2.5 mm, preferably a maximum of 2 mm.

Claim 4 (Currently Amended) A method of producing a gas generator housing part of a thin-walled tube (22, 24) and a connecting piece laterally mounted thereto, characterized by the following steps:

a) providing a tube (22, 24) having a wall thickness (WS) which amounts to a maximum of 10% of a tube external diameter (D) and a minimum tensile strength which amounts to at least approximately 800 N/mm²;

b) providing a connecting piece having an external diameter (d_o) which amounts to between 15% and 40% of said tube external diameter (D);

c) aligning said connecting piece radially to said tube (22, 24) such that an end face (78) of said connecting piece faces an outer face of said tube (22, 24);

d) joining said tube (22, 24) and said connecting piece by friction welding, by producing a relative rotation between said tube (22, 24) and said connecting piece and moving said tube (22, 24) and said connecting piece towards each other,

e) providing a maximum welding time amounting to less than 1 sec,

f) providing a friction depth (h) amounting to less than 80% of said wall thickness (WS) of said tube (22, 24), and

g) drilling a through bore (52) into said connecting piece after welding, said bore (52) being connected with an interior of said tube via a lateral opening in said peripheral wall (42, 44) produced after welding. The method according to claim 1, characterized in that a through bore (52) is drilled into said connecting piece after welding, said bore (52) being connected with an interior of said tube via a lateral opening in said peripheral wall (42, 44) produced after welding.

Claim 5 (Original) The method according to claim 1, characterized in that said connecting piece has a smaller diameter end on a tube side.

Claim 6 (Currently Amended) A method of producing a gas generator housing part of a thin-walled tube (22, 24) and a connecting piece laterally mounted thereto, characterized by the following steps:

a) providing a tube (22, 24) having a wall thickness (WS) which amounts to a maximum of 10% of a tube external diameter (D) and a minimum tensile strength which amounts to at least approximately 800 N/mm²;

b) providing a connecting piece having an external diameter (do) which amounts to between 15% and 40% of said tube external diameter (D);

c) aligning said connecting piece radially to said tube (22, 24) such that an end face (78) of said connecting piece faces an outer face of said tube (22, 24);

d) joining said tube (22, 24) and said connecting piece by friction welding, by producing a relative rotation between said tube (22, 24) and said connecting piece and moving said tube (22, 24) and said connecting piece towards each other,

e) providing a maximum welding time amounting to less than 1 sec, and

f) providing a friction depth (h) amounting to less than 80% of said wall thickness (WS) of said tube (22, 24). ~~The method according to claim 5, characterized in that~~ wherein said connecting piece has a smaller diameter end on a tube side, said smaller diameter end, with said connecting piece welded on, forms a groove in which a weld bead (80) is situated.

Claim 7 (Original) The method according to claim 6, characterized in that said weld bead (80) lies entirely inside said groove.

Claim 8 (Original) The method according to claim 6, characterized in that said weld bead (80) produced is not reworked.

Claim 9 (Original) The method according to claim 6, characterized in that before welding, said connecting piece has a flat end face (78) on said tube side.

Claim 10 (Original) The method according to claim 9, characterized in that before welding, said connecting piece is solid at an end on said tube side.

Claims 11-13 (Canceled)

Claim 14 (New) The method according to claim 1, wherein said connecting piece is aligned radially with respect to a longitudinal axis of said tube (22, 24).

Claim 15 (New) The method according to claim 1 including the steps of:

g) providing another tube (22, 24) and another connecting piece;

h) aligning said another connecting piece radially to said another tube (22, 24) such that an end face (78) of said another connecting piece faces an outer face of said another tube (22, 24); and

i) joining said another tube (22, 24) and said another connecting piece by friction welding, by producing a relative rotation between said another tube (22, 24) and said another connecting piece and moving said another tube (22, 24) and said another connecting piece towards each other.

Claim 16 (New) The method according to claim 15 including the step of providing a friction depth (h) amounting to less than 80% of a wall thickness (WS) of said another tube (22, 24).

Claim 17 (New) The method according to claim 1, wherein the friction depth (h) is more than 20% of the wall thickness (WS) of said tube (22, 24).

Claim 18 (New) The method according to claim 1, wherein the friction depth (h) is approximately two thirds of the wall thickness (WS) of said tube (22, 24).